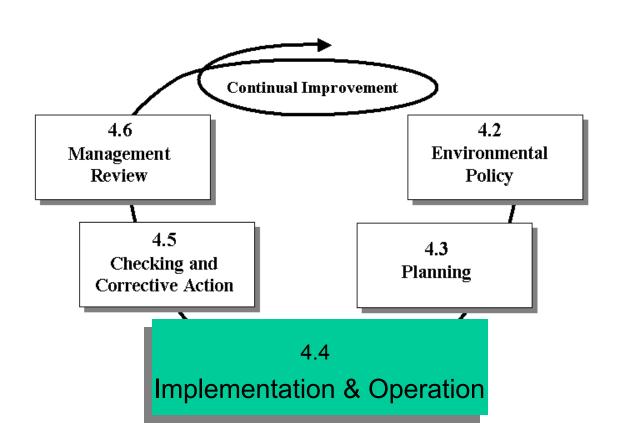


### Module 8: Implementation & Operation

- What is required by ISO 14001?
- Why is it important?
- What are key issues for Army?



### Implementation & Operation





### **Overview**

### 4.4 Implementation & Operation:

- 4.4.1 Structure & responsibility
- 4.4.2 Training, awareness, and competence
- 4.4.3 Communication
- 4.4.4 Environmental management system documentation
- 4.4.5 Document control
- 4.4.6 Operational control
- 4.4.7 Emergency preparedness and response



#### **Structure and responsibility:**

"Roles, responsibility, and authorities shall be defined, documented, and communicated in order to facilitate effective environmental management.

Management shall provide **resources** essential to the implementation and control of the environmental management system. Resources shall include human resources and specialized skills, technology, and financial resources.

The organization's top management shall appoint (a) specific **management representative**(s) who, irrespective of other responsibilities, shall have defined roles, responsibilities, & authority for:

- a) ensuring that environmental management system requirements are established, implemented, and maintained in accordance with this international Standard;
- b) reporting on the performance of environmental management system to management for review and as a basis for improvement of the environmental management system." (ISO14001Sec. 4.4.1)



### ■ Accountability at all levels is key

- Procedures need clear definition of roles & authorities at all levels
- Should align with policy, objectives & targets
- Management representative leads team & reports system performance to top mang't
- Have to put gas in the tank
  - Success is related to putting right people & resources in the right places at the right time



- Procedures should leverage Army culture of accountability
- Person designated as management representative should reflect alignment with mission priorities
  - Does not have to be environmental
- Phased EMS implementation designed to reduce total resources needed
  - Procedures should fully leverage existing programs & capabilities



### Training, awareness, and competence:

"The organization shall identify training needs. It shall require that all personnel whose work may create a **significant impact** upon the environment have received appropriate training.

It shall establish and maintain **procedures** to make its employees or members at each relevant function and level **aware** of:

- a) the importance of conformance with the environmental policy and procedures and with the requirements of the environmental management system.
- b) the significant environmental impacts, actual or potential, of their work activities and environmental benefits of improved personal performance.
- c) their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirements of the environmental management system, including emergency preparedness and response requirements.
- d) the **potential consequences** of departure from specified operating procedures.

Personnel performing the tasks which can cause **significant environmental impacts shall be competent** on the basis of appropriate **education**, **training**, **&/or experience**."(ISO14001Sec. 4.4.2)



### ■ Need for training tied to significant impacts

- Training should reflect significance of impact
- Competence via training, education, experience

### Procedures need to assure awareness at all levels

### ■ All employees need to know:

- Importance of conformance
- Impacts related to their work
- Benefits of improved performance
- Potential consequences of departing from operating procedures



- Significant impacts reflect mission priorities
  - Effectiveness of training directly tied to mission enabling
  - Shifting "ownership" of environment makes strong awareness & competence mission resources
  - Need managerial as well as technical skills
- Leverage high levels of awareness key to P2 and continual improvement
- Procedures need to expect ongoing change



### **Communication:**

- "With regard to its environmental aspects and environmental management system, the organization shall establish and maintain **procedures** for:
  - a) **internal communication** between the various levels and functions of the organization;
  - b) receiving, documenting, and responding to relevant communication from **external interested parties**.

The organization shall **consider** processes for external communication on its significant environmental aspects and **record** its decision." (ISO14001Sec. 4.4.3)



- Procedures to assure internal communication across levels & functions
  - Key to assuring full effectiveness of system
- Procedures to assure communication with external interested parties
  - Need to "consider" (vs require) external communication of significant aspects & record decision
  - Can be positive use to highlight goals & progress



- Effectiveness of communication directly tied to mission enabling
  - Policy, objectives & targets support mission
  - Better communication means better mission support
- Use external communication to show environmental excellence to communities
  - Mission advancing environmental excellence is still excellence
  - Use external communication to find joint wins with host communities & stakeholders



# Environmental management system documentation:

- "The organization shall establish and maintain information, in paper or electronic form, to:
  - a) describe the **core elements** of the management system and their interaction;
  - b) provide direction to related documents." (ISO14001Sec. 4.4.4)



- Procedures focus on documenting system elements vs environmental performance
- Need to be able to link to related materials
- Consider network-based documentation whenever possible
  - Much more accessible to users
  - Much easier to update & maintain
- Many Army installations can leverage existing intranet capabilities



### **Document Control:**

- "The organization shall establish and maintain **procedures** for controlling all documents required by this International Standard to ensure that:
  - a) they can be located;
  - b) they can be periodically reviewed, revised as necessary and approved for adequacy by authorized personnel;
  - c) the current versions of relevant documents are available at all locations where operations essential to the effective functioning of the environmental systems are performed;
  - d) obsolete documents are promptly removed from all points of use, or otherwise assured against unintended use;
  - e) any obsolete documents retained for legal and/or knowledge preservation purpose are suitably identified

Documentation shall be legible, dated (with dates of revision) and readily identifiable, maintained in an orderly manner, and retained for a specific period. Procedures and responsibilities shall be established and maintained concerning the creation and modification of the various types of document." (ISO14001Sec. 4.4.5)



- Procedures for document control focus on locating current materials and avoiding confusion with outdated material
  - Ability to assure improved procedures are used is key to continual improvement
  - Outdated procedures need to be clearly identified or removed
- Almost all organizations need improved document control
- Web-based document control has great potential benefit



- Keeping documentation current assures best practices in service of mission priorities
  - Out of date documentation incurs risk and effectiveness
  - Better procedures mean better mission support
- Web-based document control has great potential benefit
  - Web copy is only official version of document
  - Download all or parts on demand
  - Update daily as needed
  - Dramatically cuts paper & tracking costs



### **Operational Control:**

- "The organization shall identify those operations and activities that are associated with identified **significant environmental aspects** in line with this policy, objectives and targets. The organization shall plan these activities, including maintenance, in order to ensure that they are carried out under specified conditions by:
  - a) establishing and maintaining documented **procedures** to cover situations where their absence could lead to **deviations** from the environmental policy and the objectives and targets;
  - b) stipulating operating criteria in the procedures;
  - c) establishing and maintaining **procedures** related to the identifiable significant environmental aspects of goods and services used by the organization and **communicating** relevant procedures and requirements to suppliers and contractors." (ISO14001Sec. 4.4.6)



- Procedures focus on significant aspects
- Need plan to conduct activities with significant aspects under specified conditions
  - Write protocols with operating criteria
  - Address situations could produce deviations from policy, objectives & targets
  - Need to address significant aspects of goods & services used
  - Need to communicate procedures to suppliers and contractors



Operational controls keep the system on track enabling mission priorities

- Operational controls prevent deviation from mission-focused objectives & targets
- Make procedures user-accessible for full effectiveness



### **Emergency Preparedness and response:**

"The organization shall establish and maintain **procedures** to identify potential for and respond to accidents and emergency situations, and for **preventing and mitigating** the environmental impacts that may be associated with them.

The organization shall review and revise, when necessary, its emergency preparedness and response procedures, in particular, **after the occurrence** of accidents or emergency situations.

The organization shall also periodically **test** such procedures where practicable." (ISO14001Sec. 4.4.7)



- Procedures focus on identifying and responding to accidents or emergencies –
   & preventing and mitigating their impacts
- Review and revise procedures after offnormal occurrence
  - Essential to continual improvement, especially in training, communication, and operational controls
- Test procedures where practical
  - Valuable in continual improvement



- Avoiding and mitigating off-normal events and their impacts is essential to readiness
- Avoiding and mitigating off-normal events is also essential in maintaining confidence of regulators, communities, and public
- Public confidence is key to public support for realistic combat training and other mission priorities
- **■** Fully leverage existing capabilities



# Summary

### ■ Operational elements can be unpopular

- Seen as purely procedural and bureaucratic
- Mission-focused management system changes that
- Still procedural but procedures directly support mission advancing objectives and targets

### **■** Operational elements:

- Save time and keep things on track
- Amplify skill and teamwork
- Make a big difference when things start to go wrong
- Army missions are too important not to do it right



# Congratulations. You have completed Module 8.

